

IN THE CLAIMS:

Amend claims 1, 2, 4, 5 and 6 as shown in the following listing of claims, which replaces all previous listings and versions of claims.

1. (currently amended) A transmission for varying power of a motor on a working transmission shaft and on a drive transmission shaft by operation of a shift lever for transmission to working devices and drive wheels, comprising:

on the working transmission shaft,

an input gear for receiving power of the motor;

a constant-mesh transmission mechanism for transmitting power of the input gear to the working devices or cutting off the power; and

a first gear row comprising a plurality of gears integrally mounted on the working transmission shaft; and

on the drive transmission shaft,

a second gear row comprising a plurality of gears rotatably mounted on the drive transmission shaft and meshing with the first gear row; and

a key-sliding transmission mechanism axially movably mounted for rotating a selected one of the gears and the drive transmission shaft together to transmit power to the drive wheels; and

shift members attached to the constant-mesh transmission mechanism and the key-sliding transmission mechanism, respectively, which the shift members being axially movable when engaged with the shift lever for effecting a shift operation.

2. (currently amended) A transmission as set forth in claim 1, wherein the constant-mesh transmission mechanism comprises:

the working transmission shaft;

an input gear mounted on the working transmission shaft;

a coupling sleeve having teeth in mesh with the input gear;

a drive sprocket having a gear for engaging with the coupling sleeve when the coupling sleeve axially moves; and

a clutch mechanism for allowing circumferential movement of teeth of the coupling sleeve for engaging or disengaging the teeth of the coupling sleeve with or from the gear of the drive sprocket.

3. (previously presented) A transmission as set forth in claim 2, wherein the teeth of the coupling sleeve and teeth of the gear have, at first ends thereof, tapers formed opposite to one another.

4. (currently amended) A transmission as set forth in claim 2, wherein the clutch mechanism comprises:

means defining a hole formed orthogonally to the axis of the working transmission shaft;

a protruding member provided to protrude from or retract into a first opening of the hole;

an engaging member protruding from a second opening of the hole, engaging and engageable with an inside peripheral surface of the input gear so as to restrict rotation of the input gear with respect to the working transmission shaft; and

a biasing member interposed between the protruding member and the engaging member for pressing the protruding member and the engaging member outward of the hole.

5. (currently amended) A transmission as set forth in claim 4, wherein the input gear has, in an inside peripheral surface thereof, a first groove into and out of which the protruding member can move come-in and out, and a second groove which allows the engaging member to move in a rotative direction of the working transmission shaft.

6. (currently amended) A transmission as set forth in claim 5, wherein the first groove includes a depression into which the protruding member moves, comes in and an inclined surface formed circumferentially continuously from the depression.